



October 15, 2008

Philip Giudice, Commissioner
Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: Alternative Energy Portfolio Standard, G.L. Chapter 25A, Section 11F½.

Dear Commissioner Giudice:

The New England Clean Energy Council ("NECEC" or "Council") appreciates the opportunity to provide comments on the important issue of the Alternative Energy Portfolio Standard ("APS") established by the Green Communities Act (the "Act" or "GCA"). The New England Clean Energy Council's mission is to accelerate New England's clean energy economy to global leadership. Council members include industry associations, area utilities, local universities, labor and large commercial end-users as well as CEOs of the region's leading clean energy companies, representatives from the State's top law firms, and partners from over a dozen of the top New England venture capital firms.

The Council commends you, Governor Patrick, and Secretary Bowles for working with legislative leaders to bring about an extraordinary roster of clean energy legislation this past session, including the Green Communities Act and the Global Warming Solutions Act ("GWSA"). Your leadership allows Massachusetts to reap many economic and environmental benefits from the clean energy revolution. In support of achieving these goals, the Council offers the following comments on the design of the APS.

General Comments

Several over-arching principles guide the Council in making its recommendations. First, we believe that the APS should catalyze the development and commercialization of new technologies with improved environmental performance. Second, the APS should help the Commonwealth achieve the policy goals of the GCA and GWSA. Third, the APS should reward those new applications that demonstrate technological advancement.

In light of the goals articulated in the Act and the economy-wide limits of greenhouse gases required by the GWSA, the Council urges the Department to adopt strict environmental performance standards for qualifying APS technologies. Although the statute enumerates several APS-eligible technologies¹ (combined heat and power ("CHP"), gasification with capture and permanent storage, flywheel energy storage, paper-derived fuels, and energy efficient steam technology), the Department should design an APS that maximizes uniformity and consistency across various technologies.² APS technologies should compete in the marketplace so that those with the best environmental and economic performance succeed. To that end, the Council believes that uniform emissions requirements should apply to all APS technologies, that the Department should set a single APS percentage rate and a single APS alternative compliance payment.

How should the Annual APS percentage rate be determined, and what should that rate be?

The Council recommends that the Department should set a singular APS percentage that utilities can meet through the purchase of power generated by any qualifying technology. To set the annual APS

¹ See G.L. 25A § 11F ½. In addition to explicitly enumerating these technologies, the statutory language contemplates the possibility of the Department adding technologies.

² The Council recognizes that the unique features of specific technologies may require some technology-specific requirements and standards, but believes that the guiding principles and standards of the APS should remain uniform to the maximum extent possible.

percentage, the Department should conduct reviews of the achievable potential for each technology to determine the appropriate, cumulative incentive level.

What criteria should be required for any of the specified eligible technologies or fuels?

All APS-eligible technologies should be required to meet strict emissions limits. The statutory language of the GCA requires the Department to set “a net carbon dioxide emissions rate *not to exceed* the average emissions rate of existing natural gas plants” (emphasis added). Considering the principles outlined above and taking into consideration technical feasibility, the Council believes that the Department should set a limit of 550 lbs/MWh for all technologies. This limit, already achievable by 70% efficient CHP, will ensure that the APS is a tool for pushing the envelope and for rewarding technologies that carry significant climate benefits. The Department should set similarly stringent limits for other emissions (e.g., criteria air pollutants under the Clean Air Act) to promote the development of clean technologies.

In addition, the unique characteristics of specific technologies warrant individual requirements. Perhaps the most regulatorily complex technology is gasification with CCPS. The Department must take care to ensure that Massachusetts dollars do not incentivize a technology that does not bring climate benefits. This means that a process for verifying the *permanent, safe* storage of CO₂ must be established, even when the storage occurs (as is likely) in another state.

Flywheel energy storage can carry environmental and economic benefits when storing power during off-peak periods and releasing power into the grid during peak periods. Moreover, when storing power from low-emissions generating sources, flywheels can bring climate benefits as well. An example of how to ensure these climate benefits are achieved is to pair flywheel energy storage with renewable energy sources. Applicants for the credits should be prepared to demonstrate that the projects meet the specified emissions standards.

The Department should also take care to ensure that paper-derived fuels that qualify for APS provide environmental benefits. In addition to meeting the overall APS emissions requirements, only the paper-portion of these fuels should receive APS credits—generators should not be awarded APS credit for burning fossil fuels or plastics.

The Council believes that the use of “energy efficient steam technology” should be better understood before the Department determines eligibility criteria. Specifically, generators of “efficient steam technology” seeking to qualify for APS should explain (a) the type of technology being employed; (b) the source of the steam; (c) whether waste steam is being captured.

What should the Alternative Compliance Payment (ACP) amount be for APS, and how should it be calculated?

In setting the ACP, the Department must achieve a delicate balance between incentivizing new, clean technologies and keeping electricity costs down for consumers. In striking this balance, the Department should be mindful that APS technologies are unlikely to carry the same climate and environmental benefits as RPS-eligible technologies. As a result, the ACP should be set at a price lower than RPS ACPs.

The New England Clean Energy Council appreciates the opportunity to provide these comments and looks forward to continued participation as the Department develops regulations to implement the Alternative Energy Portfolio Standard.

Sincerely,

John DeVillars | Berl Hartman
Co-Chairs, Policy Committee

Nick d’Arbeloff
Executive Director